

NEWCASTLE, WYOMING EXCHANGE

CENTRAL OFFICE SERVING AREA CONSTRUCTION

The planned method of investment for this project is fiber optic to the home/business (FTTH). This will be phase four of fiber to the home construction in this exchange with phase one having been constructed in 2006. Current copper cables will not be retained after project completion and service cut over. The project includes new placement of approximately 26 route miles of fiber optic cable. Aerial, buried and underground cable placement methods are planned on this project. Other investment methods considered for this project include wireless Point to Multi Point service to the home. Existing fiber to the home investment in this area makes continued fiber to the home the best investment. Special concerns for new placement in this project include some difficult construction areas with rock excavation possible. Project planned coverage area includes an estimated 1 square mile serving area. Voice switching for this site is currently done using our circuit voice switch and will move to our packet voice switch after project completion. The current access electronics system serving these subscribers is in the Central Office and will be replaced and upgraded as part of this project. Current anchor institutions in the planned serving area interfaces are the Weston County Courthouse & Sheriff's Office also the City Police Department. This project area is included in our current RUS loan design. Funding for the project is planned to be from the current RUS loan. Expected construction completion of this project is within this calendar year. Service cut over of this project is expected to be completed in this calendar year but could extend into year 2017 for full completion. **2015 update:** This project has been split into three phases and scheduled as follows: Phase 1-2017; Phase II-2018; and Phase III-2019

NEWCASTLE, WYOMING EXCHANGE

SALEM AND SALT CREEK SERVING AREAS CONSTRUCTION (PHASE II) (SALM & SCRD)

The planned method of investment for this project is fiber optic to the home/business (FTTH) and fiber optic to the node (FTTN). Current copper cables will be retained in the Morissey Road, 3rd Street, and 5th Street remote areas. Copper cables in the Salem and Salt Creek Road areas will not be retained after project completion and service cut over. The Salem & Salt Creek fiber to the home project includes new placement of approximately 46 route miles of fiber optic cable. Buried and underground cable placement methods are planned on this project. Existing fiber to the home investment in this area makes continued fiber to the home the best investment. Special concerns for new placement in this project include some difficult construction areas with rock excavation possible. Project planned coverage area includes an estimated 2.5 square mile serving area. These serving area interfaces have a total of 295 subscriber locations with estimated 215 current broadband customers included in that number. Current broadband capabilities in these areas offer maximum service speed of 15MB download with 1MB upload. When complete most subscribers will have a current maximum available broadband service speed of 50MB download with 20MB upload. Voice switching for this area is currently done using our packet voice switch and voice service will remain using that after project completion. The current access electronics system serving these subscribers is in the Central Office and will be replaced and upgraded as part of this project. This project area is included in our current RUS loan design. Funding for the project is planned to be from the current RUS loan at this time. Expected construction completion of this project is within this calendar year but could be extended to 2016 if conditions require it and current RUS loan funding is extended. Service cut over of this project is expected to be completed in calendar year 2016 and is outlined in a line item under the 2016 listings of this document. **2015 Update:** This project went to bid in 2014 but right-of-way delays have pushed it into the 2015 modernization plan year. This project is in progress but will not be cutover until Phase II scheduled for plan year 2016.

HULETT, WYOMING EXCHANGE

CENTRAL OFFICE MAIN DC POWER BOARD AND BATTERY REPLACEMENT (HLTT)

This project includes installation of a new DC power board and battery string. The new installed DC power system will replace and upgrade our current system that has reached its life expectancy and is manufacturer discontinued. Special concerns in this project include keeping reliable Central Office DC Power to maintain operation of all local transport and access services including 911 and EMS service. Funding for the project is planned to be from general funds at this time. Expected completion of this project is within this calendar year.

HULETT, WYOMING EXCHANGE

RIDGE RADIO REPLACEMENT

The planned method of investment for this project is a new public spectrum radio unit replacement/upgrade for additional capacity. This radio link connects subscriber access carrier sites across mountainous terrain to provide voice and data service. The project includes new placement of radio electronics at two existing sites and access electronics upgrades at three existing sites. Fiber optics cable placement to replace the existing radio link has been considered and is cost prohibitive at this time. The fiber optic cable placement will be considered again in future budget years. Special concerns for new placement in this project include some difficult construction areas with rock excavation likely. The current coverage area of the radio link connected access carrier sites includes an

estimated 86 square mile serving area. Currently there is no broadband capability or service offering in these access carrier areas. When complete these 32 subscribers will have a current maximum available broadband service speed of 20MB download with 5MB upload dependent on distance from serving area interface. Voice switching for this site is currently done using our circuit voice switch and will move to our packet voice switch after project completion. As part of this project all access electronics in the project area will be upgraded to offer VDSL2 broadband and VoIP service. This project area is not included in our current RUS loan design. Funding for the project is planned to be from general funds. Expected construction completion and service cut over of this project is within this calendar year. **2015 Update: This project has been moved out to plan year 2018 due to priority changes.**

HULETT, WYOMING EXCHANGE

HULETT NORTH END CONSTRUCTION

The planned method of investment for this project is fiber optic to the home/business (FTTH). Current copper cables will not be retained after project completion and service cut over. The project includes new placement of approximately 9 route miles of fiber optic cable. Aerial, buried and underground cable placement methods are planned on this project. Other investment methods considered for this project include wireless Point-to-Multi Point service to the home. Existing fiber to the home investment in this area makes continued fiber to the home the best investment. Special concerns for new placement in this project include some difficult construction areas with rock excavation possible. Project planned coverage area includes an estimated 2 square mile serving area. Voice switching for this site is currently done using our circuit voice switch and will move to our packet voice switch after project completion. The current access electronics system serving these subscribers is in the Central Office and will be replaced and upgraded as part of this project. Current anchor institutions in the planned serving area interfaces are the Hulett Airport and Hulett Medical Clinic. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion and service cut over of this project is within this calendar year. **2015 Update: This project has been moved out to plan year 2017 due to priority changes.**

JEFFREY CITY, WYOMING EXCHANGE

JEFFREY CITY WEST ROUTE AREA (JFCW)

The planned method of investment for this project is fiber to the node (FTTN) and wireless Point-to-Point transport and the establishment of new access carrier sites for broadband service delivery. Current copper cable service delivery to the subscribers will be retained and reinforced where needed. The project includes new placement of approximately 6 new wireless transport sites and 1 route mile of copper cable. Buried cable placement methods are planned on this project. Other investment methods considered for this project include fiber to the home (FTTH) and fiber to the node (FTTN) designs. Distance between subscriber locations and cost of placement proved wireless transport and copper to the home service delivery to be the best investment. Special concerns for new placement in this project include securing new property easement for new wireless site locations. Project planned coverage area includes an estimated 36 square mile serving area. Voice switching for this area is currently done using our packet voice switch and voice service will remain using that after project completion. As part of this project all access electronics in the project area will be upgraded to offer VDSL2 broadband and VoIP service. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion and service cut over of this project is within this calendar year. **2015 Update: This project has been moved up from plan year 2018 due to priority changes.**

JEFFREY CITY, WYOMING EXCHANGE

JEFFREY CITY EAST & SOUTH ROUTE AREAS (JFCE) (JFCS)

The planned method of investment for this project is fiber to the node (FTTN) and wireless Point-to-Point transport and the establishment of new access carrier sites for broadband service delivery. Current copper cable service delivery to the subscribers will be retained and reinforced where needed. The project includes new placement of approximately 6 new wireless transport sites and 1 route mile of copper cable. Buried cable placement methods are planned on this project. Other investment methods considered for this project include fiber to the home (FTTH) and fiber to the node (FTTN) designs. Distance between subscriber locations and cost of placement proved wireless transport and copper to the home service delivery to be the best investment. Special concerns for new placement in this project include securing new property easement for new wireless site locations. Project planned coverage area includes an estimated 49 square mile serving area. Voice switching for this area is currently done using our packet voice switch and voice service will remain using that after project completion. As part of this project all access electronics in the project area will be upgraded to offer VDSL2 broadband and VoIP service. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion and service cut over of this project is within this calendar year. **2015 Update: This project has been moved up from plan year 2018 due to priority changes.**

SHOSHONI, WYOMING EXCHANGE

SHOSHONI BASE RATE CONSTRUCTION (PHASE I) (SHSH)

The planned method of investment is not decided at this time with broadband service being the goal. Current copper cables may or may not be retained in project design. The project will include an estimated 16 route miles of fiber optic cable if fiber to the home service is used and/or an estimated 4 new wireless sites if wireless delivery to the home is used. Aerial and buried cable placement methods are being considered for this project as well as the establishment of new wireless site locations. Investment methods being considered for this project include wireless Point-to-Multi Point service to the home as well as fiber to the node (FTTN) or fiber to the home (FTTH) type service delivery. Consideration is being given to cost, performance, and reliability in the decisions planning the investment and service enhancement in this area. We expect some advancement in all technology types in the coming years that will allow us to proceed with the best investment for service delivery. Special concerns for new placement in this project include some difficult construction areas with rock excavation possible and possible land and easement issues if establishing new wireless sites. Project planned coverage area includes an estimated 4 square mile serving area. Voice switching for this site is currently done using our packet voice switch and voice service will remain using that after project completion. The current access electronics system serving these subscribers is in the Central Office and will be replaced and upgraded as part of this project. Current anchor institution in the planned serving area interface is the Shoshoni School. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion and service cut over of this project is within this calendar year. **Update 2015: This project has been split into two phases with Phase I being moved up to 2016 and Phase II being moved outside of the current 5-year plan to year 2020 due to priority changes.**

OSAGE, WYOMING EXCHANGE

CENTRAL OFFICE RETIREMENT (OSAG)

The planned method of investment for this project is the establishment of a new access carrier site to provide service to all subscribers in this exchange and allow us to retire our current central office building. Current copper cable service delivery to the subscribers will be retained. The project includes placement of a new electronics cabinet at the current Central Office Site. Other investment methods considered for this project include wireless Point-to-Multi Point service delivery to the home. Existing copper cable investment and capacity proved utilizing current fiber optic cable for transport to a new local access carrier site to be the best investment. Project planned coverage area includes an estimated 7 square mile serving area. When complete subscribers will have a current maximum available broadband service speed of 20MB download with 5MB upload. Voice switching for this site is currently done using our circuit voice switch and will move to our packet voice switch after project completion. As part of this project the new access electronics site will be placed to offer VDSL2 broadband and VoIP voice service. This project area is not included in our current RUS loan design. Funding for the project is planned to be from general funds at this time. Expected construction completion and service cut over of this project is within this calendar year.

2015 Update: This project was moved out from plan year 2015 to plan year 2016 due to priority changes.

ALBIN, WYOMING EXCHANGE

KIRKBRIDE RANCH AREA (KBRD)

The planned method of investment for this project is wireless Point-to-Point transport and the establishment of new access carrier sites for broadband service delivery. Current copper cable service delivery to the subscribers will be retained and reinforced where needed. The project includes new placement of approximately 6 new wireless transport sites and 1 route mile of copper cable. Buried cable placement methods are planned on this project. Other investment methods considered for this project include fiber to the home (FTTH) and fiber to the node (FTTN) designs. Distance between subscriber locations and cost of placement proved wireless transport and copper to the home service delivery to be the best investment. Special concerns for new placement in this project include securing new property easement for new wireless site locations. Project planned coverage area includes an estimated 54 square mile serving area. This serving area has 13 subscribers with 0 current broadband customers included in that number. Currently there is no broadband capability or service offering in this area. Voice switching for this area is currently done using our packet voice switch and voice service will remain using that after project completion. As part of this project all access electronics in the project area will be upgraded to offer VDSL2 broadband and VoIP voice service. This project area is not included in our current RUS loan design. Funding for the project is planned to be from general funds at this time. Expected construction completion and service cut over of this project is within this calendar year.

2015 Update: This project has been moved out to plan year 2016 due to priority changes.

MULTIPLE EXCHANGES AS NOTED BELOW

UPGRADE AFC ACCESS CARRIER SITES TO BROADBAND LOOP CARRIER

The planned method of investment for this project is equipment upgrade of the current access carrier electronics and multiple sites. Current copper cable service delivery to the subscribers will be retained. The project includes placement of new electronics

equipment in existing access carrier sites. Other investment methods considered for this project include wireless Point-to-Multi Point and fiber optic service delivery to the home. Peak and valley type terrain eliminated the use of wireless Point-to-Multi Point and distance between subscribers proved fiber to the node (FTTN) the best investment. When complete subscribers will have a current maximum available broadband service speed of 20MB download with 5MB upload. As part of this project the current access electronics at the site will be replaced and upgraded to offer VDSL2 broadband and VoIP voice service. These project areas are included in our current RUS loan design. Funding for the project is planned to be from general funds at this time. Expected construction completion and service cut over of this project is within this calendar year.

<u>Carrier Cabinet Upgrades</u>		<u>Area Impacted</u>	<u>Population Impacted</u>
HLTT	New Haven	26 Sq. Miles	22 Subscribers
NWCS	Buckhorn	12 Sq. Miles	42 Subscribers
NWCS	Sweetwater	23 Sq. Miles	35 Subscribers
NWCS	Whoop-Up Canyon	10 Sq. Miles	34 Subscribers
THRM	Cowboy Mine	22 Sq. Miles	56 Subscribers
WRLD	Cottonwood	12 Sq. Miles	10 Subscribers
MDWS	Lynch	28 Sq. Miles	77 Subscribers

2015 Update: These projects have been added to the modernization plan

RT COMMUNICATIONS-ALL EXCHANGES TECHNICIAN SERVICE TRUCK VEHICLES

In 2016 RT Communications plans to replace two 1 ton diesel engine dual wheel construction service trucks. We currently have several high mileage service trucks and will decide on specific unit numbers for replacement as needed in the year. Due to RT Communications service area being very large the mileage put on each service truck yearly is very high. To ensure the safety of employees as well as ensuring serviceable vehicles, the company must regularly replace service trucks.

Plan Year 2017

NEWCASTLE, WYOMING EXCHANGE NEWCASTLE WEST END CONSTRUCTION

The planned method of investment for this project is fiber optic to the home/business (FTTH). This will be phase five of fiber to the home construction in this exchange with phase one having been constructed in 2006. Current copper cables will not be retained after project completion and service cut over. The project includes new placement of approximately 31 route miles of fiber optic cable. Aerial, buried and underground cable placement methods are planned on this project. Other investment methods considered for this project include wireless Point to Multi-Point service to the home. Existing fiber to the home investment in this area makes continued fiber to the home the best investment. Special concerns for new placement in this project include some difficult construction areas with rock excavation possible. Project planned coverage area includes an estimated 3 square mile serving area. Voice switching for this site is currently done using our circuit voice switch and will move to our packet voice switch after project completion. The current access electronics system serving these subscribers is in the Central Office and will be replaced and upgraded as part of this project. Current anchor institutions in the planned serving area interfaces are the Weston County Road & Bridge Office and Weston County Fire Department. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion of this project is within this calendar year. Service cut over of this project is expected to be completed in this calendar year but could extend into year 2018 for full completion. **2015 Update:** This project has been moved out to plan year 2019 due to priority changes.

NEWCASTLE, WYOMING EXCHANGE CENTRAL OFFICE SERVING AREA CONSTRUCTION (PHASE I) (NWCS)

The planned method of investment for this project is fiber optic to the home/business (FTTH). This will be phase four of fiber to the home construction in this exchange with phase one having been constructed in 2006. Current copper cables will not be retained after project completion and service cut over. The project includes new placement of approximately 26 route miles of fiber optic cable. Aerial, buried and underground cable placement methods are planned on this project. Other investment methods considered for this project include wireless Point-to-Multi Point service to the home. Existing fiber to the home investment in this area makes continued fiber to the home the best investment. Special concerns for new placement in this project include some difficult construction areas with rock excavation possible. Project planned coverage area includes an estimated 1 square mile serving area. Voice switching for this site is currently done using our circuit voice switch and will move to our packet voice switch after project completion. The current access electronics system serving these subscribers is in the Central Office and will be

replaced and upgraded as part of this project. Current anchor institutions in the planned serving area interfaces are the Weston County Courthouse & Sheriff's Office also the City Police Department. This project area is included in our current RUS loan design. Funding for the project is planned to be from the current RUS loan. Expected construction completion of this project is within this calendar year. Service cut over of this project is expected to be completed in this calendar year but could extend into year 2017 for full completion. **2015 update: This project has been split into three phases and scheduled as follows: Phase I-2017; Phase II-2018; and Phase III-2019**

HULETT, WYOMING EXCHANGE

HULETT NORTH END CONSTRUCTION (HLTT)

The planned method of investment for this project is fiber optic to the home/business (FTTH). Current copper cables will not be retained after project completion and service cut over. The project includes new placement of approximately 9 route miles of fiber optic cable. Aerial, buried and underground cable placement methods are planned on this project. Other investment methods considered for this project include wireless Point-to-Multi Point service to the home. Existing fiber to the home investment in this area makes continued fiber to the home the best investment. Special concerns for new placement in this project include some difficult construction areas with rock excavation possible. Project planned coverage area includes an estimated 2 square mile serving area. Voice switching for this site is currently done using our circuit voice switch and will move to our packet voice switch after project completion. The current access electronics system serving these subscribers is in the Central Office and will be replaced and upgraded as part of this project. Current anchor institutions in the planned serving area interfaces are the Hulett Airport and Hulett Medical Clinic. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion and service cut over of this project is within this calendar year. **2015 Update: This project has been moved out from plan year 2016 due to priority changes.**

WORLAND, WYOMING EXCHANGE

HANOVER REMOTE ACCESS CARRIER SITE (HNVR)

The planned method of investment for this project is fiber optic transport to the existing node (FTTN) and equipment upgrade of the node electronics. Current copper cable service delivery to the subscribers will be retained. The project includes new placement of approximately 4 route miles of fiber optic cable. Buried cable placement method is planned on this project. Other investment methods considered for this project include wireless Point-to-Point transport. Lack of direct line of site and tree growth eliminated the use of wireless Point-to-Point and proved fiber optic placement the best investment. Special concerns for new placement in this project include narrow highway corridor work area may require private easement for construction. Project planned coverage area includes an estimated 12 square mile serving area. Voice switching for this site is currently done using our packet voice switch and voice service will remain using that after project completion. As part of this project the current access electronics at the site will be replaced and upgraded to offer VDSL2 broadband and VoIP service. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion and service cut over of this project is within this calendar year. **2015 Update: This project has been moved up from plan year 2018 due to priority changes.**

PINE BLUFFS, WYOMING EXCHANGE

CENTRAL OFFICE SERVING AREA CONSTRUCTION (PHASE I) (PNBL)

The planned method of investment for this project is fiber optic to the home/business (FTTH). Current copper cables will not be retained after project completion and service cut over. The Pine Bluffs CO project includes new placement of approximately 36 route miles of fiber optic cable. Aerial, buried and underground cable placement methods are planned on this project. Other investment methods considered for this project include wireless Point-to-Multi Point service to the home. Existing fiber to the home investment in this area makes continued fiber to the home the best investment. Special concerns for new placement in this project include some difficult construction areas with rock excavation possible. Project planned coverage area includes an estimated 4 square mile serving area. These serving area interfaces have an estimated total of 812 subscriber locations with estimated 400 current broadband customers included in that number. Current broadband capabilities in these areas offer maximum service speed of 15MB download with 1MB upload. When complete all subscribers will have a current maximum available broadband service speed of 50MB download with 20MB upload. Voice switching for this site is currently done using our packet voice switch and voice service will remain using that after project completion. The current access electronics system serving these subscribers is in the Central Office and will be replaced and upgraded as part of this project. Current anchor institutions in the planned serving area interfaces are the Pine Bluffs City Police Department and University of Wyoming Distance Learning Center. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the current RUS loan at the time. Expected construction completion of this project is within this calendar year. Service cut over of this project is expected to be completed in this calendar year but could extend into year 2020 for full completion. **2015 Update: This project was originally**

targeted for 2019 but has been split into two phases with Phase I being moved up to 2017 and Phase II being moved up to 2018 due to priority changes.

BURNS, WYOMING EXCHANGE

NORTH STUCKEY ROAD ACCESS CARRIER SITE (STRD)

The planned method of investment for this project is fiber optic transport to the node (FTTN) and to establish new access carrier electronics sites. Current copper cable service delivery to the subscribers will be retained. The project includes new placement of approximately 13 route miles of fiber optic cable. Buried cable placement methods are planned on this project. Other investment methods considered for this project include wireless Point-to-Point transport. Existing fiber to the node service in the area and existing copper cable eliminated the use of wireless Point-to-Point and proved fiber optic placement the best investment. Special concerns for new placement in this project include some private easement construction areas. Project planned coverage area includes an estimated 29 square mile serving area. Voice switching for this site is currently done using our packet voice switch and voice service will remain using that after project completion. As part of this project the current access electronics at the site will be replaced and upgraded to offer VDSL2 broadband and VoIP voice service. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion and service cut over of this project is within this calendar year. **2015 Update: This project was moved up from 2018 due to priority changes.**

OSAGE, WYOMING EXCHANGE

SUNDOWN TRAIL SUBDIVISION (SNTR)

The planned method of investment for this project is fiber optic to the home or business (FTTH). Sundown Trail Subdivision project includes placement of a new PON cabinet and splicing to re-arrange fibers. Existing fiber to the home service in the area eliminated the use of wireless Point-to-Point and proved fiber optic placement the best investment. Project planned coverage area includes an estimated 14 square mile serving area. These serving area interfaces currently have an estimated 40 subscribers with 26 current broadband customers included in that number. Current broadband capabilities at this site offer maximum service speed of 6MB download with 512KB upload. When complete subscribers will have a current maximum available broadband service speed of 20MB download with 5MB upload. Voice switching for this site is currently done using our packet voice switch and voice service will remain using that after project completion. As part of this project the current access electronics at the site will be replaced and upgraded to offer VDSL2 broadband and VoIP voice service. Funding for the project is planned to be from the current RUS loan at the time. Expected construction completion and service cut over of this project is within this calendar year. **2015 Update: This project was added to the 5-year plan due to priority.**

MOORCROFT, WYOMING EXCHANGE

PINEDALE ROAD AND SERVICE TO AT&T TOWER (PNDL)

The planned method of investment for this project is fiber optic transport to the node (FTTN) and to establish new access carrier electronics sites. Current copper cable service delivery to the subscribers will be retained. Pinedale Road project includes new placement of approximately 6 route miles of fiber optic cable. Buried cable placement methods are planned on this project. Other investment methods considered for this project include wireless Point-to-Point transport. Existing fiber to the node service in the area and existing copper cable eliminated the use of wireless Point-to-Point and proved fiber optic placement the best investment. Special concerns for new placement in this project include some private easement construction areas. Project planned coverage area includes an estimated 8 square mile serving area. These serving area interfaces currently have an estimated 70 subscribers with 34 current broadband customers included in that number. Current broadband capabilities at this site offer maximum service speed of 6MB download with 512KB upload. When complete subscribers will have a current maximum available broadband service speed of 20MB download with 5MB upload. Voice switching for this site is currently done using our packet voice switch and voice service will remain using that after project completion. As part of this project the current access electronics at the site will be replaced and upgraded to offer VDSL2 broadband and VoIP voice service. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the current RUS loan at the time. Expected construction completion and service cut over of this project is within this calendar year.

2015 Update: This project was added to the 5-year plan due to priority.

KAYCEE, WYOMING EXCHANGE

KAYCEE BASE RATE CONSTRUCTION

The planned method of investment is not decided at this time with broadband service being the goal. Current copper cables may or may not be retained in project design. The project will include an estimated 16 route miles of fiber optic cable if fiber to the home service is used and/or an estimated 4 new wireless sites if wireless delivery to the home is used. Aerial and buried cable placement methods are being considered for this project as well as the establishment of new wireless site locations. Investment methods being considered for this project include wireless Point to Multi Point service to the home as well as fiber to the node (FTTN) or fiber to the home (FTTH) type service delivery. Consideration is being given to cost, performance, and reliability in the decisions planning the investment and service enhancement in this area. We expect some advancement in all technology types in the coming years that will allow us to proceed with the best investment for service delivery. Special concerns for new placement in this project include some difficult construction areas with rock excavation possible and possible land and easement issues if establishing new wireless sites. Project planned coverage area includes an estimated 4 square mile serving area. Voice switching for this site is currently done using our circuit voice switch and will move to our packet voice switch after project completion. The current access electronics system serving these subscribers is in the Central Office and will be replaced and upgraded as part of this project. Current anchor institution in the planned serving area interface is the Johnson County Medical Clinic. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion and service cut over of this project is within this calendar year. **2015 Update:** This project has been moved out beyond the initial 5-year plan date range due to priority changes. Currently targeted for 2021.

SHOSHONI, WYOMING EXCHANGE

CENTRAL OFFICE HVAC EQUIPMENT (SHSH)

We have been advised by our current air system maintenance contractor to plan for replacement of the current heating and cooling equipment in the Shoshoni Central Office. The current data type cooling system is located inside the building and limited in size because of that. Recent expansions of the Central Office transport and access equipment has added more cooling demand on the current unit making it clear we must plan for this upgrade. The recommended replacement would be a roof mount unit with some duct work additions to correct the air flow inside the building.

MIDWEST, WYOMING EXCHANGE

CENTRAL OFFICE MAIN DC POWER BOARD AND BATTERY REPLACEMENT (NWCS)

This project includes installation of a new DC power board and battery string. The new installed DC power system will replace and upgrade our current system that has exceeded its life expectancy and is manufacturer discontinued. Special concerns in this project include keeping reliable Central Office DC Power to maintain operation of all local transport and access services including 911 and EMS service. Funding for the project is planned to be from general funds. Expected completion of this project is within this calendar year.

RT COMMUNICATIONS-ALL EXCHANGES

TECHNICIAN SERVICE TRUCK VEHICLES

In 2017 RT Communications plans to replace two ¾ ton gasoline engine service trucks. We currently have several high mileage service trucks and will decide on specific unit numbers for replacement as needed in the year. Due to RT Communications service area being very large the mileage put on each service truck yearly is very high. To ensure the safety of employees as well as ensuring serviceable vehicles, the company must regularly replace service trucks.

Plan Year 2018

MOORCROFT, WYOMING EXCHANGE

BASE RATE AREA CONSTRUCTION

The planned method of investment for this project is fiber optic to the home/business (FTTH). Current copper cables will not be retained after project completion and service cut over. The project includes new placement of approximately 13 route miles of fiber optic cable. Aerial, buried and underground cable placement methods are being considered for this project. At this time we are evaluating working with the local power company to utilize the existing power poles for all aerial cable placements. Other investment methods considered for this project include wireless Point to Multi Point service to the home. Not currently having any tower locations and bordering areas with existing fiber to the home investment in this area makes continued fiber to the home the best investment. Special concerns for new placement in this project include some difficult construction areas with rock excavation possible. Project planned coverage area includes an estimated 9 square mile serving area. Voice switching for this site is currently done using our circuit voice switch and will move to our packet voice switch after project completion. The current access electronics

system serving these subscribers is in the Central Office and will be replaced and upgraded as part of this project. Current anchor institutions in the planned serving area interfaces are the Crook County Medical Clinic, Moorcroft Library and Moorcroft Police Department. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion of this project is within this calendar year. Service cut over of this project is expected to be completed in this calendar year but could extend into year 2019 for full completion. **2015 Update: This project was moved out to 2019 due to priority change.**

MOORCROFT, WYOMING EXCHANGE

CENTRAL OFFICE MAIN DC POWER BOARD AND BATTERY REPLACEMENT (MRCR)

This project includes installation of a new DC power board and battery string. The new installed DC power system will replace and upgrade our current system that has reached its life expectancy and is manufacturer discontinued. Special concerns in this project include keeping reliable Central Office DC Power to maintain operation of all local transport and access services including 911 and EMS service. Funding for the project is planned to be from general funds at this time. Expected completion of this project is within this calendar year.

MOORCROFT, WYOMING EXCHANGE

UPGRADE AFC ACCESS CARRIER SITES

The planned method of investment for this project is equipment upgrade of the current access carrier electronics and possibly to add new sites. Current copper cable service delivery to the subscribers will be retained. The project includes placement of new electronics equipment in existing access carrier sites. Other investment methods considered for this project include fiber to the home and as budget years continue that method may be chosen. Distance between subscribers proves fiber to the node (FTTN) the best investment until future budgeting can be done for fiber to the home. Project planned coverage area includes an estimated 360 square miles of serving areas. Voice switching for this site is currently done using our circuit voice switch and will move to our packet voice switch after project completion. As part of this project the current access electronics at the site will be replaced and upgraded to offer VDSL2 broadband and VoIP service. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion and service cut over of this project is within this calendar year. **2015 Update: Projects detailing the upgrade of AFC Digital Loop Carrier (DLC) sites to next generation Broadband Loop Carrier (BLC) have been reclassified and are now included at the end of this project year narrative by CLI Code.**

CARPENTER, WYOMING EXCHANGE

CENTRAL OFFICE RETIREMENT (CRPN)

The planned method of investment for this project is the establishment of a new access carrier site to provide service to all subscribers in this exchange and allow us to retire our current central office building. Current copper cable service delivery to the subscribers will be retained. The project includes placement of a new electronics cabinet at the current Central Office Site. Other investment methods considered for this project include wireless Point to Multi Point service delivery to the home. Existing copper cable investment and capacity proved utilizing current fiber optic cable for transport to a new local access carrier site to be the best investment. Project planned coverage area includes an estimated 4 square mile serving area. Voice switching for this site is currently done using our packet voice switch and voice service will remain using that after project completion. As part of this project the new access electronics site will be placed to offer VDSL2 broadband and VoIP voice service. This project area is not included in our current RUS loan design or planned for our future RUS loan. Funding for the project is planned to be from general funds. Expected construction completion and service cut over of this project is within this calendar year.

CARPENTER, WYOMING EXCHANGE

CARPENTER WEST RE-ENFORCEMENT

The planned method of investment for this project is fiber optic to the home/business (FTTH). Current fiber optic cables will be retained but current copper cables in this area will not be retained after project completion and service cut over. The project includes new placement of approximately 6 route miles of fiber optic cable. Buried and underground cable placement methods are planned on this project. Other investment methods considered for this project include wireless Point to Multi Point service to the home. Existing fiber to the home investment in this area makes continued fiber to the home the best investment. Special concerns for new placement in this project include some private easement construction areas. Project planned coverage area includes an estimated 7 square mile serving area. Voice switching for this site is currently done using our packet voice switch and voice service will remain using that after project completion. This project area is planned to be included in our next RUS loan design. Funding for the project is planned to be from the future RUS loan. Expected construction completion and service cut over of this project is within this calendar year. **2015 Update: This project was eliminated due to priority change.**